# Barkatullah University (Open Book) Examination Dec. 2020

### M.Sc. II Semester Botany(ATKT)

Note: All questions are compulsory from every section Maximum marks: 85 for each section.

#### **Section A**

Paper I (201) Cell Biology and Genetics.

- Q.1. Explain the structure and organization of plant cell.
- Q.2. Describe structure and function of mitochondria
- Q.3. Describe in detail structure of chromosomes.
- Q.4. Write note on numerical changes in chromosomes.
- Q.5. Explain the law of Independence.

# **Section B**

# Paper II (202) Plant development and Reproduction

- Q.6. What is meristematic tissues? Explain.
- Q.7. Describe the modifications of leaves.
- Q.8. Describe the process of microsporogenesis.
- Q.9. Write note on double fertilization.
- Q.10. What is pollination and their types?

# **Section C**

### Paper III (203) Plant Physiology

-

- Q.11. Write an account on mechanism of water absorption.
- Q.12. Describe in detail receptors and G-protein.
- Q.13. Explain in detail mechanism of action of Auxin.
- Q.14. Explain photoperiodism and its significance.
- Q.15. Explain in detail about biotic and abiotic stress.

## **Section D**

### Paper IV (204) Plant Ecology - I

Q.16. Describe in detail about population ecology.

Q.17. Describe in detail about Biodiversity and its conservation.

Q.18. Describe in detail Ecological Succession and their types.

Q.19. Explain food chain in detail.

Q.20. Describe physical and chemical properties of soil.